

EQUINOX 100™

personal computer kit



EQUINOX 100

THE FRONTRUNNER



WIRING CHANNEL*, cord wrap* and detachable line cord help keep your system neat.

RESET SWITCH is located to avoid accidental bumps. Automatic reset when the power is turned on.

INTEGRATED CPU/FRONT-PANEL combines on a single board a high-performance 8080A CPU with one of the most powerful front panels available on any computer. This board plugs directly into the bus-board, and the complete front panel module slides in for easy assembly.

COOLING FAN with finger guard is standard.

20-SLOT S-100 BUS-BOARD is fully shielded and actively terminated to eliminate noise and crosstalk. Exquisite quality and design... plus extras like reserve space for peripheral power regulators.

HANDSOMELY MODERN CASE of rugged aluminum construction is accented with black vinyl trim and smoked plexiglass. Equinox 100 will enhance your home or office.

SWING-OPEN TOP* and sliding bottom panels provide easy access.

TILT-UP STAND* lifts the front panel to a convenient angle for use.

KEY-OPERATED POWER SWITCH helps prevent accidental loss of program or data. Stops unauthorized use of system.

GOLD-CONTACT KEYBOARD puts reliable programming and debugging at your fingertips, even without peripherals... run, halt, single-step, Slow-Step or alter your programs right here!

BIG LED DIGITS display the contents of any CPU register, I/O device or memory location in concise octal format. Monitor any part of your program when halted... or as you step through your program!

8080A CPU is compatible with an enormous choice of peripheral components and software, including BASIC. All 8 internal registers can be accessed directly from the front panel!

CARRYING HANDLE* allows easy mobility.

CONSTANT VOLTAGE POWER SUPPLY delivers over 20 amps despite AC line surges and brownouts to prevent crashed programs. Plenty of power for your future boards and peripherals. Plug-together design eliminates soldering and exposed connections.

Years in front in design, function and front-panel capability

The personal computer.

Just a few years ago it was science fiction. Today, over 25,000 American households have constructed and operate personal computer systems.

This high-speed revolution in the American lifestyle was sparked by the 1975 introduction of a fully functional computer mainframe, in kit form, for under \$600. The concept captured the imaginations of electronics hobbyists and computer professionals.

Soon, the pioneering Altair 8800** was engulfed in The Personal Computer Movement it created. Derivative models, after-market components, plug-in peripherals, software and even a number of personal computing magazines suddenly appeared ... along with an increasingly diverse population of system builders.

Applications also became more diverse. From teaching logic to balancing checkbooks. From staging video games to keeping inventory. From waking the kids to guarding the gates.

The introduction of the Equinox 100 system in 1977 is the next big step in the evolution of the personal computer.

More than a collection of general improvements in component quality and organization, Equinox 100 takes dramatic leaps forward in making the personal computer a permanent, active, useful feature of the American home and office.

Equinox 100 has been designed in every physical and functional way to be easily built, easily operated and increasingly utilized by someone exactly like you.

It's not just a good computer kit. It produces a fine computer.

FRONT PANEL CAPABILITY

The Equinox 100 is based on the 8080A Central Processing Unit and S-100 bus-board system, making the system compatible with the greatest number of input/output devices, software and circuit boards available for personal computer systems.

But the Equinox 100 uses these popular components in far more effective ways.

The single greatest advantage of the Equinox 100 design is the combining of two major elements, the CPU Board and the Front Panel Board, into a single, intelligent, highly accessible and marvelously functional unit. This integration allows most CPU functions to be accomplished with a blend of hardware and software intelligence, opening a whole spectrum of new front panel capabilities.

You can enter and read out on your front panel in non-ambiguous octal LED digits, instead of flashing binary lights.

You can manipulate the contents of all CPU registers, input/output devices and memory locations directly on a front panel keyboard.

And, for the first time, you can perform these operations as the Equinox 100 runs in single-step or Slow-Step™ from 1 to 64K steps per minute.

The front panel can also be controlled by your programs for direct data display and input. Asking for data, for instance. Or performing as a digital clock.

Thus, Equinox 100's unique front panel intelligence gives its owner complete programming and de-bugging capability ... even before peripherals are added to the system. Equinox offers, quite simply, one of the most powerful front panels on any computer in the world.



MORE INSIDE

Equinox 100 comes equipped with one of the most reliable computer power supplies available today: the famous Parasitic Engineering constant voltage power supply in a specially designed 20-amp version. This deluxe power supply guards against program crashes due to AC line surges and brownouts as low as 90 VAC, while providing ample power for up to 19 additional circuit boards which can be accommodated by the 20-slot bus.

The power supply plugs together to eliminate soldering and exposed wiring. The Equinox S-100 type bus-board is double-sided and solder masked, fully shielded and actively terminated to squelch noise and crosstalk. Reserve space is provided for user installation of power regulators for peripherals. All card guides and two gold-plated 100-pin edge connectors are included. This standard edge connector is widely available (but check our special price for a complete set purchased with your Equinox 100).

With components like these, Equinox 100 isn't just putting up a big front. It's years in front in quality and total capability, as well.

WELL-DRESSED

Equinox 100 was conceived, from the very beginning, to be a convenient and well-integrated tool for the home environment. That's why special care went into the outward appearance of the system.

The Equinox 100 enclosure is a sleekly proportioned aluminum case accented with black vinyl trim and smoked plexiglas, handsome enough to rival the most expensive stereo components. A key-operated power switch guards against accidental shutoff and unauthorized use in the home or office. A tilt-up stand*, carrying handle*, detachable line cord and cord storage* add convenience and portability.

Equinox 100 was designed to be displayed prominently.

AND EASY TO MAKE

Particular emphasis has been placed on making Equinox 100 highly tolerant of home building in kit form. While no computer system is child's play, Equinox 100 reduces performance-critical building operations to an absolute minimum.

For example, the front panel plugs into the bus-board with no complex cables, the power supply plugs together without soldering.

And with the ability to test the completed assembly directly from the front panel, the Equinox 100 kit offers a high probability of successful completion.

The building manual and supporting documentation provided with the Equinox 100 kit are clear, extraordinarily detailed and fully illustrated...we believe the best ever provided with any computer kit.

And we encourage you to call us toll-free at 800-648-5311 should any questions or problems develop during the building of your Equinox 100. We're glad to help.

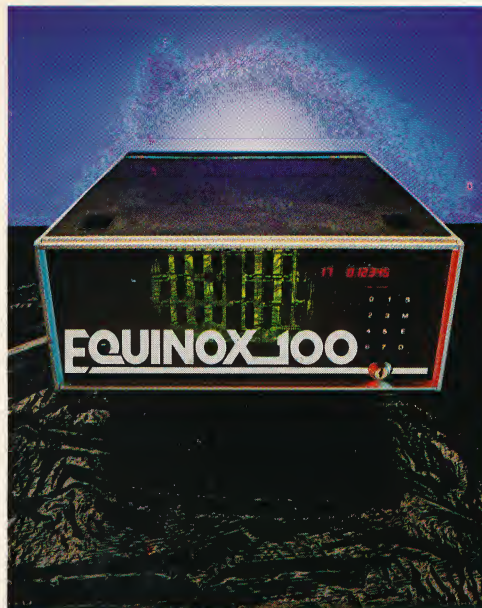
*Optional equipment at added cost **Altair is a trademark of MITS Inc.

EQUINOX 100 SPECIFICATIONS

COMPONENT	TYPE	REMARKS
MICROPROCESSOR	8080A	2 MHz clock rate
USER PROGRAM ADDRESS SPACE	65,024 bytes	
BUS	S-100 compatible 20-slot	Fully shielded and actively terminated; all card guides included
POWER SUPPLY	Constant Voltage	INPUT RANGE: 90-140 VAC/60 Hz. OUTPUTS: +9V at 20 amps ±16V at 6 amp total
VENTILATION	Forced air	
FRONT PANEL DISPLAY	Octal digit LED	10 seven-segment digits
FRONT PANEL KEYBOARD	12-key pushbutton	Gold cross-point type 0-7 plus S, M, E and D
DIMENSIONS	7" H x 17" W x 20" D	
WEIGHT	35 LBS	

FRONT PANEL FUNCTIONS

HALT, RUN & RESET
EXAMINE & DEPOSIT
all CPU registers (individual or pairs)
all memory locations
all I/O devices



FRONT PANEL FUNCTIONS

SINGLE STEP &
PROGRAMMABLE SLOW-STEP™
WHILE MONITORING
any CPU register (individual or pairs)
any memory location
any I/O device

Range: 1-64,000/min.

STANDARD FEATURES INCLUDED

Fan with fingerguard
2 100-pin edge connectors
19 pairs of card guides
Power keyswitch with 2 keys
Detachable line cord
High performance CPU/front-panel board with all features and
performance detailed above
20-slot fully shielded and actively terminated bus-board
Constant voltage 20-amp power supply
All-aluminum cabinet with sliding top and bottom and smoked
plexiglass front

OPTIONS AVAILABLE

Swing-open top for cabinet
Wiring channel
Tilt-up stand
Carrying handle
Cord storage
Complete edge connector set
4K memory board
8K memory board
General purpose/cassette I/O board

Specifications subject to change without notice.

FOR ADDITIONAL INFORMATION AND ORDERING

Write: Equinox Division
Parasitic Engineering
P.O. Box 6314
Albany, California 94706
Call: 800-648-5311

EQUINOX 100

personal computer kit

A product of Parasitic Engineering

SEE EQUINOX 100 IN PERSON AT YOUR NEAREST PERSONAL COMPUTER STORE